STATE OF CONNECTICUT

House of Representatives

General Assembly

File No. 88

January Session, 2013

Substitute House Bill No. 6441

House of Representatives, March 20, 2013

The Committee on Environment reported through REP. GENTILE of the 104th Dist., Chairperson of the Committee on the part of the House, that the substitute bill ought to pass.

AN ACT CONCERNING THE DAM SAFETY PROGRAM.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

- 1 Section 1. Section 22a-401 of the general statutes is repealed and the
- 2 following is substituted in lieu thereof (*Effective October 1, 2013*):
- 3 All dams, dikes, reservoirs and other similar structures, with their
- 4 appurtenances, without exception and without further definition or
- 5 enumeration herein, which, by breaking away or otherwise, might
- 6 endanger life or property, shall be subject to the jurisdiction conferred
- 7 by this chapter. The Commissioner of Energy and Environmental
- 8 Protection shall formulate all rules, definitions and regulations
- 9 necessary to carry out the provisions of this chapter and not
- 10 inconsistent therewith. The commissioner or his authorized
- 11 representatives may enter upon private property to make such
- 12 investigations and gather such data concerning dams, watersheds,
- 13 sites, structures and general conditions as may be necessary in the
- 14 public interest for a proper inspection, review and study of the design
- and construction of such structures and of the environmental impact of

16 such structures on the inland wetlands of the state. The commissioner 17 may, when necessary, employ or make such agreements with 18 geologists, other engineers, expert consultants and such assistants as 19 may be reasonably necessary to carry out the provisions of this 20 chapter. [The owner of any dam, dike or similar structure under the 21 jurisdiction conferred by this chapter shall notify the commissioner, by 22 registered or certified mail return receipt requested, of the transfer of 23 ownership of any such dam, dike or similar structure not later than ten 24 days after the date of such transfer.]

- Sec. 2. Subsection (b) of section 22a-403 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2013*):
 - (b) The commissioner or his representative, engineer or consultant shall determine the impact of the construction work on the environment, on the safety of persons and property and on the tidal wetlands and inland wetlands and watercourses of the state in accordance with the provisions of sections [22a-36] 22a-28 to 22a-45, inclusive, and shall further determine the need for a fishway in accordance with the provisions of section 26-136, and shall examine the documents and inspect the site, and, upon approval thereof, the commissioner shall issue a permit authorizing the proposed construction work under such conditions as the commissioner may direct. The commissioner shall send a copy of the permit to the town clerk in any municipality in which the structure is located or any municipality which will be affected by the structure. An applicant for a permit issued under this section to alter, rebuild, repair or remove an existing dam shall not be required to obtain a permit under sections [22a-36] <u>22a-28</u> to 22a-45a, inclusive, or section 22a-342, <u>22a-361</u> or 22a-368. An applicant for a permit issued under this section to construct a new dam shall not be required to obtain a permit under sections [22a-36] 22a-28 to 22a-45a, inclusive, for such construction. An applicant for a dam safety permit shall not be required to obtain approval of a certification under section 25-68d.

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Sec. 3. Section 22a-404 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2013*):

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The [commissioner or his representative] dam owner or his or her representative supervising the work on any dam or other like structure subject to the commissioner's jurisdiction pursuant to this chapter shall [inspect the work or cause it] cause the work to be inspected by a registered professional engineer licensed in the state to the extent necessary to determine whether the structure will be safe and secure. [The] For a high or significant hazard dam, or if the commissioner determines a sensitive ecological condition exists, the commissioner may [, when in his judgment circumstances warrant,] place a competent inspector on the work, and the compensation for such inspector shall be shared equally by the state and by the owner. When the work has been completed to the satisfaction of the commissioner, the owner shall file with the commissioner plans and descriptions of the work as actually constructed, together with any other pertinent data. Not later than thirty days after the date the work is completed, the dam owner shall submit to the commissioner a sworn statement from the engineer who completed such inspection. Such sworn statement shall (1) attest that such engineer inspected the work and determined the dam or like structure to be safe within the parameters of the design of such dam or like structure, (2) attest that all appurtenances to such dam or like structure were built, repaired, altered or removed in conformance with plans, specifications and drawings approved by the commissioner pursuant to a permit for construction or an order issued pursuant to section 22a-402, and (3) bear the engineer's professional seal.

- Sec. 4. Section 22a-409 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2013*):
- (a) The commissioner shall cause a survey and maps to be made of each town showing the location of any dams or similar structures within such town, and shall file a copy of such map with the town clerk. On and after October 1, 2007, the owner of real property where a

high hazard or significant hazard dam is located shall cause to be recorded on the land records in the municipality where the property is located a document that identifies the existence of the dam and whether the dam is categorized as a high hazard dam or a significant hazard dam. The commissioner shall publish a standardized form to be used for such purposes.

- (b) The owner of any dam or similar structure not already registered shall register on or before [July 1, 1984] October 1, 2015, with the Commissioner of Energy and Environmental Protection on a form prescribed by [him] the commissioner, the location and dimensions of such dam or structure and such other information as the commissioner may require. The fee for registration shall be as follows: (1) Dams or similar structures five feet or more in height but less than fifteen feet, fifty dollars; (2) dams or similar structures fifteen feet or more in height but less than twenty-five feet, one hundred dollars; and (3) dams or similar structures twenty-five feet or more in height, two hundred dollars. Dams or similar structures less than five feet in height shall be registered without fee. As used in this subsection, "height" means the vertical distance from the crest of a dam or similar structure to the downstream toe of such dam or similar structure. The owner of any dam or similar structure shall notify the commissioner by registered or certified mail, return receipt requested, of a transfer of ownership of such dam or similar structure not later than ten days after the date of such transfer.
- (c) The owner of any dam or similar structure registered pursuant to subsection (b) of this section shall cause such structure to be inspected in accordance with regulations adopted pursuant to this subsection by a registered professional engineer licensed in the state and shall submit the results of such inspection to the commissioner on a form prescribed by the commissioner. The commissioner shall periodically inspect dams registered pursuant to subsection (b) of this section for quality assurance when an owner fails to undertake a regularly scheduled inspection and as necessary after a flood event. The fee for any such inspection shall be six hundred sixty dollars until such time as

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regulations are adopted concerning such inspection fees. Any dam which impounds less than three acre-feet of water or any dam which the commissioner finds has a potential for negligible damage in the event of a failure, after an initial inspection, shall be exempt from the provisions of this subsection except upon determination by the commissioner that such dam poses a unique hazard. The commissioner shall adopt regulations in accordance with the provisions of chapter 54 establishing (1) a schedule for the frequency of and procedures for inspection of dams, (2) the inspection fees for [regularly scheduled] inspections undertaken by the department, sufficient to cover the reasonable cost of such inspections, (3) procedures for registration and criteria for waiver of registration and inspection fees, and (4) criteria for determining whether a dam has a potential for negligible damage in the event of a failure.

(d) The commissioner may audit any inspection report submitted pursuant to this section by the owner of a dam or similar structure. When conducting such audit, the commissioner may request, in writing, any information the commissioner deems necessary to carry out such audit, including additional information or field inspections. If the commissioner determines that the inspection report is materially inaccurate, incomplete or misleading, the commissioner may require that another inspection be independently undertaken by a disinterested registered professional engineer licensed in the state. For purposes of this subsection, "disinterested" means that such engineer (1) does not have any financial interest, other than the expectation of reasonable compensation for his or her services, (2) did not engage in any activities associated with the development or preparation of the inspection being audited, and (3) is not under the same employ as the owner of the dam or similar structure or the engineer who performed the inspection that is being audited. Such independent inspection shall be performed at the expense of the owner of the dam or similar structure. The commissioner shall adopt regulations in accordance with the provisions of chapter 54 to establish the manner in which the owner of the dam or similar structure: (A) Shall receive notice of such independent inspection, and (B) may appeal the cost of such

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Sec. 5. (NEW) (Effective October 1, 2013) After the Commissioner of Energy and Environmental Protection's adoption of regulations pursuant to this section, the owner of any high or significant hazard dam or similar structure shall develop and implement an emergency action plan. The emergency action plan shall be updated every two years and copies shall be filed with the Commissioner of Energy and Environmental Protection and the chief executive officer of any municipality that would potentially be affected in the event of an emergency. The Commissioner of Energy and Environmental Protection shall adopt regulations, in accordance with the provisions of chapter 54 of the general statutes, establishing the requirements for such emergency action plans, including, but not limited to, (1) criteria and standards for inundation studies and inundation zone mapping; (2) procedures for monitoring the dam or structure during periods of heavy rainfall and runoff, including personnel assignments and features of the dam to be inspected at given intervals during such periods; and (3) a formal notification system to alert appropriate local officials who are responsible for the warning and evacuation of residents in the inundation zone in the event of an emergency.

Sec. 6. Section 22a-411 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2013*):

(a) The commissioner may issue a general permit for any minor activity regulated under sections 22a-401 to 22a-410, inclusive, <u>as amended by this act</u>, except for any activity covered by an individual permit, if the commissioner determines that such activity would cause minimal environmental effects when conducted separately and would cause only minimal cumulative environmental effects. Such activities may include routine maintenance and routine repair of any dam, dike, reservoir or other similar structure <u>or the removal of any dam to improve fish passage or to provide other ecological benefits</u>. Any person conducting an activity for which a general permit has been issued shall not be required to obtain an individual permit under

sections 22a-36 to 22a-45a, inclusive, or section 22a-342, 22a-368 or 22a-403, as amended by this act, except as provided in subsection (c) of this section. A general permit shall clearly define the activity covered thereby and may include such conditions and requirements as the commissioner deems appropriate, including, but not limited to, management practices and verification and reporting requirements. The general permit may require any person conducting any activity under the general permit to report, on a form prescribed by the commissioner, such activity to the commissioner before it shall be covered by the general permit. The commissioner shall prepare, and shall annually amend, a list of holders of general permits under this section, which list shall be made available to the public.

(b) Notwithstanding any other procedures specified in [said] sections 22a-401 to 22a-410, inclusive, as amended by this act, any regulation adopted thereunder, and chapter 54, the commissioner may issue, revoke, suspend or modify a general permit in accordance with the following procedures: (1) The commissioner shall publish in a newspaper having a substantial circulation in the affected area or areas notice of intent to issue a general permit; (2) the commissioner shall allow a comment period of thirty days following publication of such notice during which interested persons may submit written comments to the commissioner and the commissioner shall hold a public hearing if, within said comment period, he receives a petition signed by at least twenty-five persons; (3) the commissioner may not issue the general permit until after the comment period; and (4) the commissioner shall publish notice of any issued permit in a newspaper having substantial circulation in the affected area or areas. Any person may request that the commissioner issue, modify or revoke a general permit in accordance with the provisions of this subsection.

(c) Subsequent to the issuance of a general permit, the commissioner may require any person to obtain an individual permit under the provisions of [said] sections 22a-401 to 22a-410, inclusive, <u>as amended by this act</u>, for all or any portion of the activities covered by the general permit, if in the commissioner's judgment the purposes and policies of

said sections would be best served by requiring an application for an individual permit. The commissioner may require an individual permit under this subsection only if the affected person has been notified in writing that an individual permit is required. The notice shall include a brief statement of the reasons for the decision and a statement that upon the date of issuance of such notice the general permit as it applies to the individual activity will terminate.

(d) Any general permit issued under this section [shall] <u>may</u> require that any person intending to conduct an activity covered by such general permit [shall, at least sixty days before initiating such activity,] give written notice of such intention to the inland wetlands agency, zoning commission, planning commission or combined planning and zoning commission, and conservation commission of any municipality which will or may be affected by such activity, and to the department which shall make such notices available to the public. The general permit shall specify the information which must be contained in the notice. [An inland wetlands agency, planning and zoning commission, conservation commission or any person may submit written comments to the commissioner concerning such activity no later than twenty-five days before the date that the activity is proposed to begin.]

(e) The commissioner may adopt regulations in accordance with the provisions of chapter 54 to carry out the purposes of this section.

This act shall take effect as follows and shall amend the following sections:		
Section 1	October 1, 2013	22a-401
Sec. 2	October 1, 2013	22a-403(b)
Sec. 3	October 1, 2013	22a-404
Sec. 4	October 1, 2013	22a-409
Sec. 5	October 1, 2013	New section
Sec. 6	October 1, 2013	22a-411

ENV Joint Favorable Subst.

The following Fiscal Impact Statement and Bill Analysis are prepared for the benefit of the members of the General Assembly, solely for purposes of information, summarization and explanation and do not represent the intent of the General Assembly or either chamber thereof for any purpose. In general, fiscal impacts are based upon a variety of informational sources, including the analyst's professional knowledge. Whenever applicable, agency data is consulted as part of the analysis, however final products do not necessarily reflect an assessment from any specific department.

OFA Fiscal Note

State Impact: None

Municipal Impact: None

Explanation

The bill requires owners of a high or significant hazard dam to develop and implement an emergency action plan. There is no fiscal impact, as the state and municipalities have already developed emergency action plans.

The bill also makes other changes which are not anticipated to result in a fiscal impact to the state or municipalities.

Background

There is currently \$7.4 million in unallocated general obligation (GO) bond funds through the State Bond Commission (SBC) in FY 13 for the dam safety program. The Governor's Recommended budget additionally proposes \$6 million in FY 14 and \$5 million in GO bonds FY 15 for this program.

These funds are used to repair and modernize state-owned dams in compliance with the Army Corps of Engineers and state safety standards.

In FY 09 the Department of Energy and Environmental Protection (DEEP) Inland Water Resources Division hired a consultant to inspect state-owned dams. The study resulted in the development of a prioritized list of repairs of state-owned dams and an estimated cost for each project.

The Out Years

State Impact: None

Municipal Impact: None

OLR Bill Analysis sHB 6441

AN ACT CONCERNING THE DAM SAFETY PROGRAM.

SUMMARY:

By law, the Department of Energy and Environmental Protection (DEEP) commissioner has jurisdiction over dams, dikes, and similar structures whose failure might endanger life or property. This bill makes many changes to the dam safety laws, including reducing the commissioner's inspection responsibilities. Among other things, it:

- 1. requires owners of unregistered dams or similar structures to register them by October 1, 2015 (§ 4);
- 2. generally shifts, from the commissioner to the owners of dams or similar structures, regularly scheduled inspection and reporting requirements (§ 4);
- 3. creates an audit and independent inspection procedure the commissioner can invoke for materially inaccurate, incomplete, or misleading regularly scheduled inspection reports (§ 4);
- 4. makes owners generally responsible for supervising and inspecting construction work and establishes new reporting requirements for owners when the work is completed (§ 3);
- 5. requires the commissioner to consider the impact on tidal wetlands when deciding to issue a construction permit (§ 2);
- 6. exempts construction permit applicants from additional permitting requirements (§ 2);
- 7. allows the commissioner to issue a general permit for dam removal projects that provide certain ecological benefits (§ 6);

8. allows, rather than mandates, a dam activity general permit to require notice of the proposed activity and eliminates a provision that allows written comments on the activity to be submitted to the commissioner (§ 6); and

9. requires owners of high or significant hazard dams or similar structures to develop and implement an emergency action plan (§ 5).

The bill requires the commissioner to adopt regulations that include requirements for (1) regularly scheduled dam inspections, (2) independent inspections conducted during audits, and (3) emergency action plans.

By law, the commissioner may issue a warning notice for certain violations of the dam safety laws and bring an enforcement action to correct them (CGS § 22a-6s). Violating the dam safety laws or an order or permit issued under them also subjects a violator to a fine of up to \$1,000 for each offense, as determined by the court. The attorney general may bring an action to enjoin the violation, require its correction, and collect the fine, if the commissioner requests it (CGS § 22a-407).

It also makes minor and technical changes.

EFFECTIVE DATE: October 1, 2013

§§ 1 & 4 — DAM REGISTRATION AND TRANSFER NOTIFICATION

The bill gives owners of unregistered dams or similar structures until October 1, 2015 to register them. Current law imposes no registration requirements on those that were not registered by July 1, 1984.

The bill also removes a requirement that a dike (an embankment for controlling floodwaters or erosion) owner notify the DEEP commissioner within 10 days after a transfer in ownership.

§§ 3 & 4 — DAM INSPECTION

Regularly Scheduled Inspection

Current law requires the DEEP commissioner to periodically inspect registered dams. The bill instead requires that an owner of a registered dam or similar structure (1) have it inspected by a Connecticut-licensed registered professional engineer and (2) submit the inspection results to the commissioner on a form he prescribes.

The bill requires the commissioner to conduct inspections (1) for quality assurance when an owner fails to undertake a regularly scheduled inspection or (2) that are necessary after a flood. Until superseding regulations are adopted, the fee for such an inspection is \$660, the fee specified under current law.

Current law requires the DEEP commissioner to set in regulations, among other things, an inspection frequency schedule and fees for regularly scheduled inspections. The bill requires him to adopt regulations that (1) include dam inspection procedures and (2) set the fees for the inspections DEEP conducts, instead of fees for regularly scheduled inspections.

Regular Inspection Audit Procedure

The bill allows the DEEP commissioner to audit any regularly scheduled inspection report submitted by the owner of a dam or similar structure. He may request, in writing, any information necessary to perform the audit, including field inspections.

If the commissioner determines the inspection report is materially inaccurate, incomplete, or misleading, he can require the owner to pay for an independent inspection performed by a disinterested, Connecticut-licensed registered professional engineer. Under the bill, "disinterested" means that the engineer (1) has no financial interest except the expectation of reasonable compensation for services, (2) did not participate in preparing or developing the inspection to be audited, and (3) does not work for the same employer as the owner or the owner's engineer who performed the inspection under audit.

The bill requires the DEEP commissioner to adopt regulations

establishing procedures for (1) notifying owners about independent inspections and (2) owners to appeal the cost of inspections.

Construction Inspection

The bill requires a dam owner, or its representative supervising work on a dam or similar structure under DEEP's jurisdiction, to have it inspected by a Connecticut-licensed registered professional engineer to determine if it will be safe and secure. Current law specifies that the DEEP commissioner or his representative supervises the work and requires him or his representative to inspect or have the dam or similar structure inspected.

The bill allows the commissioner to place a competent inspector on construction work of a dam or similar structure if (1) it involves a high or significant hazard dam (see BACKGROUND) or (2) he determines a sensitive ecological condition exists. Current law allows him to do so when he believes circumstances warrant it. By law and unchanged by the bill, the cost of such inspector is shared equally by the state and the owner.

The bill requires a dam owner to submit a sworn statement from the inspecting engineer to the commissioner within 30 days after work is completed. The statement must attest that (1) the engineer inspected the work and determined the dam or similar structure to be safe within its design parameters and (2) all appurtenances were built, repaired, altered, or removed according to the plans, specifications, and drawings approved by the commissioner under a permit or order. It must bear the engineer's professional seal.

§§ 2 & 6 — DAM PERMITS

Individual Permit Requirements

By law, anyone seeking to construct, alter, rebuild, substantially repair, add to, replace, or remove a dam or similar structure must obtain a permit from the DEEP commissioner.

The bill requires the commissioner or his representative, engineer, or consultant to determine the proposed construction's impact on tidal

wetlands before issuing a permit, in addition to determining its impact on (1) the environment, (2) the safety of people and property, and (3) inland wetlands and watercourses, as current law requires.

Exemptions

Under the bill, a permit applicant seeking to alter, rebuild, repair, or remove an existing dam no longer needs to obtain separate permits for (1) conducting a regulated activity in tidal wetlands or (2) dredging, erecting structures, or placing fill, obstructions, or encroachments in tidal, coastal, or navigable waters. The law already exempts such permit applicants from obtaining a stream channel encroachment, diversion, or inland wetland and watercourse regulated activity permit.

The bill also grants an additional exemption for new dam construction applicants. Existing law exempts them from obtaining a permit to conduct a regulated activity in an inland wetland or watercourse. Under the bill, they no longer need a permit to conduct a regulated activity in a tidal wetland.

Additionally, if an applicant is a state agency, it no longer needs to obtain DEEP's permission or a waiver to engage in certain activities within or affecting a floodplain.

General Permit for Dam Removal

By law, the DEEP commissioner can issue a general permit for any minor dam activity if he determines that the activity would have minimal environmental effects, unless it is covered by an individual permit (see BACKGROUND). The bill expands the activities that may be covered under general permits to include dam removal that (1) improves fish passage or (2) provides other ecological benefits. Existing law allows them to cover routine maintenance and repairs.

The law generally exempts people conducting minor dam activity under a general permit from obtaining an individual permit for (1) inland wetland or watercourse regulated activity, (2) stream channel encroachment, (3) diversion, and (4) dam construction. The bill extends

this exemption to dam removal for improving fish passage or providing other ecological benefits.

Under current law, people intending to do work under a minor dam activity general permit must provide 60 days' written notice to the (1) inland wetlands agency, zoning commission, planning commission or combined planning and zoning commission, and conservation commission of any municipality that will or may be impacted by the activity and (2) departments that makes such notices publicly available. The bill instead requires notice only when mandated by the general permit. It also eliminates current law's provision allowing any person or an inland wetlands agency, planning and zoning commission, or conservation commission to submit written comments on an activity covered by such a general permit to the DEEP commissioner at least 25 days before the activity starts.

§ 5 — EMERGENCY ACTION PLAN

The bill requires the owner of a high or significant hazard dam or similar structure to develop and implement an emergency action plan after the DEEP commissioner adopts regulations establishing plan requirements. The requirements must include:

- 1. criteria and standards for inundation (i.e., flood) studies and zone mapping,
- 2. procedures for monitoring the dam or structure during heavy rainfall and runoff periods such as (a) personnel assignments and (b) dam features to be inspected at given intervals, and
- 3. notice to alert appropriate local officials responsible for warning and evacuating residents in the inundation zone during an emergency.

The bill requires dam owners to file a copy of their emergency action plan with the (1) DEEP commissioner and (2) chief executive officer of any potentially affected municipality. The plan must be updated biennially.

BACKGROUND

High or Significant Hazard Dam

State regulations classify dams by the hazards they would pose if they failed. A high hazard dam is one whose failure would result in (1) probable loss of life; (2) major damage to habitable structures, homes, hospitals, convalescent homes, or schools; (3) damage to main highways; or (4) great economic loss.

A significant hazard dam is one whose failure would result in (1) possible loss of life; (2) minor damage to habitable structures, homes, hospitals, convalescent homes, or schools; (3) damage to, or interruption of, utility service; (4) damage to primary roadways or railroads; or (5) significant economic loss (Conn. Agencies Reg. § 22a-409-2(d)).

General Permit

DEEP uses both individual and general permits to regulate activities. Individual permits are issued directly to an applicant, while general permits authorize similar minor activities by one or more applicants. The authorization of an activity under a general permit is governed by that general permit.

COMMITTEE ACTION

Environment Committee

Joint Favorable Substitute Yea 26 Nay 1 (03/04/2013)